The opinion in support of the decision being entered today was <u>not</u> written for publication and is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte UMESH C. DESAI and ANTHONY C. PALERMO

Appeal No. 2001-1762
Application No. 09/226,903

ON BRIEF

Before OWENS, DELMENDO, and POTEATE, $\underline{\text{Administrative Patent}}$ $\underline{\text{Judges}}$.

DELMENDO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 (2002) from the examiner's final rejection of claims 1 through 11 and 14 in the above-identified application. Claim 15, which is the only other pending claim, has been withdrawn from further consideration pursuant to a restriction requirement. See 37 CFR § 1.142(b) (1959).

The subject matter on appeal relates to epoxy resin-

containing coating compositions suitable for use as adhesives, anti-flutter compositions, and coatings (e.g., for body panel reinforcement and sound dampening). (Specification, page 1, lines 5-7.) Further details of this appealed subject matter are recited in representative claim 1, the only independent claim on appeal, reproduced below:

- 1. A curable coating composition comprising:
 - (a) at least one epoxy-functional polymer containing at least two epoxide groups per molecule present in an amount ranging from about 55 to about 99 weight percent of total resin solids of the coating composition;
 - (b) at least one thermoplastic polymer which is substantially insoluble in the epoxy-functional polymer present in an amount ranging from about 1 to about 45 weight percent of total resin solids of the coating composition;
 - (c) ground vulcanized rubber particles having an average particle size ranging from about 1 to about 300 microns present in an amount ranging from about 1 to about 70 weight percent of total resin solids of the coating composition; and
 - (d) a curing agent adapted to cure the epoxy-functional polymer.

The examiner relies on the following prior art references as evidence of unpatentability:

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Sugimori et al. (Sugimori)	4,501,853	Feb.	26,	1985
Schappert et al. (Schappert)	4,739,019	Apr.	19,	1988
Magnani et al. (Magnani) ¹	DE 3809003 A1	Sep.	29,	1988

Claims 1 through 11 and 14 on appeal stand rejected under 35 U.S.C. § 103(a) as unpatentable over Schappert in view of Magnani and Sugimori. (Examiner's answer of Feb. 12, 2001, paper 16, pages 3-4.)

We reverse this rejection.

Schappert describes a curable composition comprising:

- (a) one or more epoxide group containing materials containing at least two epoxide groups per molecule;
- (b) a positive amount of an effectively thermoplastic polyester, which does not react into the curable composition and is present as a blended ingredient, which does not exceed 40 percent by weight based on the total weight of the epoxide and polyester components of the composition, said polyester having a weight average molecular weight of from about 1,000 to about 8,000, being non-reactive with the one or more epoxide group

The examiner and the appellants also refer to this reference as the "German patent." Also, our citations to this patent are to the English language translation found in the record.

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containing materials and being insoluble in the one or more epoxide group containing materials of (a); and

(c) a curing agent adapted to cure the one or more epoxide group containing materials of (a). (Column 1, lines 29-45.)

Further, Schappert teaches that the curable composition "can contain a variety of additives including pigments, reinforcements, thixotropes, plasticizers, extenders, stabilizers and antioxidants." (Column 5, lines 63-66.)

The examiner admits that Schappert does not teach component (c), i.e. the ground vulcanized rubber particles, as recited in appealed claim 1. (Answer, page 3.) In an attempt to account for this difference, the examiner relies on the teachings of Magnani and Sugimori.

Magnani teaches a sound absorbing coating, which is particularly suitable for coating the structural parts of motor vehicle bodies, containing a resin such as an epoxide resin, an organic carrier, and a filler in the form of particles of natural gum or synthetic rubber having a particle size between 100 and 1,500 microns (e.g., pulverized used tires). (Page 2, right column.)

Sugimori discloses a curable epoxy resin composition comprising an epoxy resin and vulcanized rubber particles having a particle size of 0.5 to 30 microns, which are obtained by

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vulcanizing a dispersion of fine particles of liquid rubber incompatible with the epoxy resin in the epoxy resin with a vulcanizing agent. (Column 2, lines 47-52.)

The examiner's basic position is stated as follows (answer, page 4):

It would have been obvious to add the vulcanized rubber of the German patent [Magnani] and Sugimori et al as an additive or extender of Schappert et al in order to improve the noise absorption (German patent, page 3, first column, third full paragraph), flexibility and mechanical strength (Sugimori et al, col. 1, lines 24-30 and col. 2, lines 22-30).

We cannot agree. As pointed out by the appellants (appeal brief, pages 6-7 and 11-14), the composition described in Schappert is completely different from the composition described in either Magnani or Sugimori.

In particular, Schappert does not teach the use of an organic carrier. Also, Schappert's composition contains a thermoplastic polyester that is non-reactive and is insoluble in the epoxide group containing material (a). Further, Schappert's composition contains a curing agent (e.g., an aliphatic, cycloaliphatic, or aromatic polyfunctional amine) adapted to cure the one or more epoxide group containing material (a).

By contrast, Magnani discloses a composition containing a resin such as an epoxide resin, an organic carrier, and a filler in the form of particles of natural gum or synthetic rubber

having a particle size between 100 and 1,500 microns (e.g., pulverized used tires). While Magnani describes the use of various metal naphthenates in the examples, the examiner has not established on this record that these materials are curing agents adapted to cure the epoxy-functional polymer. Sugimori discloses a curable epoxy resin composition comprising an epoxy resin and vulcanized rubber particles having particle sizes of 0.5 to 30 microns, which are obtained by vulcanizing a dispersion of fine particles of liquid rubber incompatible with the epoxy resin in the epoxy resin with a vulcanizing agent without any grinding. Like Magnani, Sugimori does not teach the use of component (b) as recited in appealed claim 1.

Our reviewing court has instructed that both the suggestion and reasonable expectation of success must be founded in the prior art, not in applicants' disclosure. In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991) (citing In re Dow Chemical Co., 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988)). Here, we find nothing in the collective teachings of the prior art that would have led one of ordinary skill in the art to combine the references in the manner as proposed by the examiner. Nor do we find anything in the prior art to indicate that one of ordinary skill in the art would have carried out the proposed modification of Schappert with a

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reasonable expectation of success. While the examiner would have us believe that the differences between Schappert, on one hand, and Magnani and Sugimori, on the other, are inconsequential, the examiner has not identified any evidence or acceptable scientific reasoning to support this assertion. In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984).

For these reasons, we hold that the examiner has engaged in impermissible hindsight reconstruction. <u>In re Dembiczak</u>, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999); <u>In re Rouffet</u>, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998); <u>In re Warner</u>, 397 F.2d 1011, 1016, 154 USPQ 173, 177 (CCPA 1967).

We therefore reverse the examiner's rejection under 35 U.S.C. § 103(a) of all the appealed claims as unpatentable over Schappert in view of Magnani and Sugimori.

The decision of the examiner is reversed.

REVERSED

Terry J. Owens)	
Administrative Patent	Judge)	
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)	BOARD OF PATENT
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Administrative Patent	Judge)	APPEALS AND
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